REMARKS

Claims 1-19 are pending. Claims 1, 9 and 16 have been amended to explicitly recite what was implicitly recited by these claims for purposes of clarity, and were not amended for reasons related to patentability. The rejections are traversed for the reasons discussed below, and all of the pending claims are in condition for allowance.

The Office action has required formal drawings. Formal drawings are submitted with this response.

The Office action has rejected all the claims under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,012,130 to Beyda et al ("Beyda"). Applicant respectfully traverses these rejections. In the following, applicant provides an overview of the invention and of Beyda, and then discusses their differences.

Applicant's technique transparently extends the storage capacity of a computer when a new storage device is added by automatically including the additional storage capacity within the existing namespace of the file system. Using applicant's technique, there is no need to assign a separate drive letter and, thereby, create a new namespace for the additional storage mechanism. Applicant's technique effectively combines storage space from existing and new storage devices so that it appears as a single volume drive letter within the same namespace of a file system. This is accomplished through the use of link files dynamically created in the file system on the pre-existing storage device that point to files on the new storage device. Each link file may also contain part of the contents of a file. With applicant's technique, complete or partial files within this namespace may be automatically migrated from the pre-existing storage device to the new

storage device. New files may simply be added to the existing namespace by placing a link file in the file system on the pre-existing storage device and storing the new file on the new storage device. Because links are maintained in the original storage device, applicant's technique also effectively supports the addition of removable storage. The namespace remains unchanged even if the new storage device is removed. Without using applicant's technique, a user would need to add the new drive under a new drive letter as a new volume with its own namespace.

Beyda relates to a technique for automatically upgrading a disk drive. The technique automatically performs a series of operations to configure, partition and format an upgraded disk drive. Included in the technique is adding the new drive under a new drive letter as a new volume with its own separate namespace. Once so installed, the technique then provides a user with the option to use the upgraded drive as the boot drive or as a secondary device. If the upgraded drive is to be used as the boot drive, then the operating system, software applications, and application data is automatically transferred from the old drive to the new drive. The user then re-cables the disk drives so that the new upgraded drive will function as the default boot drive. Optionally, the operating system parameters may be automatically manipulated to re-map the addresses of the two disk drives so that the new drive will be mapped as the boot drive and the old drive will be mapped as a secondary device.

Significantly, in contrast to the present invention, Beyda does not describe transparently extending the storage capacity of a computer by including additional storage within the existing namespace of the file system. Rather, Beyda relates to replacing the existing boot drive with a drive having more storage capacity or alternatively adding a secondary drive. Specifically, Beyda describes adding the new drive under a new drive letter, thereby creating a new namespace for the new storage mechanism. A user must then manage multiple namespaces, each with its own volume

and free space as described in Beyda. Indeed, Beyda essentially teaches away from the present invention.

The following table lists the elements of claim 1 and the prior art sections upon which the Office action has relied as allegedly disclosing those elements.

	Claim 1 Element	Prior Art
A.	detecting the addition of a new storage mechanism not mounted in a namespace of the file system viewable by a user	Once the new drive has been physically installed, the operating system and hardware must be appropriately configured so that the new drive is recognized and usable by the operating system and computer hardware. ... (Beyda, 1: 8-11; 5:62-65; 6:1-18)
B.	selecting a file in the namespace of the file system from the existing storage mechanism	At this functional step, the user may be presented with the option of selecting particular data and/or application software that is to be transferred from the old drive to the new upgraded disk drive. In one embodiment, the user could specify exactly which files should be transferred to the new drive. . ... (Beyda, 7: 38-55)
C.	moving at least part of the file data of the selected file to the new storage mechanism	Alternatively, a menu or listing could be displayed on the computer monitor 134 that lists each of the application programs and/or data files that exist on the old drive, thereby providing the ability for the user to specify which of those files should be transferred over to the new upgraded disk drive. ... At that step, a series of computer instructions are processed so as to effect the transfer/copy of the operating system files present on the old drive (e.g. currently drive c), to the new upgraded drive (e.g. currently drive d:). ... (Beyda, 7:42-67)
D.	providing a link on the existing storage mechanism to the file data moved to the new storage mechanism such that the file data moved to the new storage mechanism is accessible via the link	That functional step is that portion of the program method that effects the copying of all the application software on the old drive to the new upgrade drive. In addition, any corresponding user data and files (e.g. word processing documents, spreadsheets, databases, etc.) are also copied to the new drive. ... (Beyda, 8:16-30)

Note that there are numerous and significant differences between the plainly claimed subject matter in claim 1 and the cited portions of Beyda. However, Applicants will emphasize the

differences of elements A and D for purposes of brevity, as these differences clearly point out the patentability of claim 1 over Beyda.

First, element A of claim 1 recites "detecting the addition of a new storage mechanism not mounted in a namespace of the file system viewable by a user." The sections of Beyda allegedly disclosing this element do not describe this feature. Rather, Beyda describes appropriately configuring the upgrade disk drive by formatting and designating the new upgraded drive with a new logical device identifier. *Beyda*, column 6, lines 33-67. This adds the new drive *under a new drive letter* as a new volume with its own separate namespace, which is a significant difference from the subject matter recited in claim 1.

For example, once formatted and designated with a new namespace, Beyda describes presenting the user with the option of using the new upgraded disk drive with its separate namespace as a secondary storage device rather than reassigning it as the primary boot drive. See *Beyda*, column 7 lines 26-37. For using the new upgraded drive as the primary boot drive, Beyda describes transferring the operating system files from the namespace of the old drive (e.g., currently drive c:), to the new namespace of the upgraded drive (e.g., currently drive d:). *Beyda*, column 7 lines 57-65. The new storage mechanism identified in Beyda is mounted such that a user must then manage multiple namespaces, each with its own volume identifier and free space, as described in Beyda. Thus, unlike applicant's linking concept, the new storage cannot be transparently combined within the existing namespace of the existing storage because the new storage is mounted with a separate namespace that the user manages.

Second, element D of claim 1 recites "providing a link on the existing storage mechanism to the file data moved to the new storage mechanism." In general, applicant's technique maintains links on the existing storage mechanism to provide a unified view of the namespace for the

combined storage from the existing and new storage devices. Applicant's links are dynamically created in the file system on the pre-existing storage device that point to files on the new storage device.

The section of Beyda that is relied upon to allege anticipation simply does not describe such a link. Rather, the portion of Beyda describes copying entire application programs and associated user document and files after the operating system is copied to the upgraded drive. The application programs and associated user documents and files described by Beyda are actual files, not links, and there is a significant difference between applicant's link and actual file as described in Beyda. Consistent with the general concept of a link, each of applicant's links contain information for identifying the location of an actual file, and do not need to contain actual file contents, in contrast to the whole application programs and user documents copied over by Beyda. Note, however, that although applicant's link files are links, links may additionally contain part of the contents of a file so that complete or partial files may be automatically migrated from the pre-existing storage device to the new storage device. Using applicant's technique, new files may be simply added to the existing namespace by placing a link file in the file system on the pre-existing storage device and storing (at least part of) the new file's contents on the new storage device. This extends the storage capacity within the same volume / namespace. Moreover, because links are maintained in the original storage device, applicant's technique also effectively supports the addition of removable storage. The namespace remains unchanged even if the new storage device is removed.

In sum, Beyda simply describes copying actual files to a new volume having its own drive letter-identified namespace. Each file in Beyda is treated as a single unit; nothing in Beyda describes a link on an existing storage mechanism to the file data on a new storage mechanism while maintaining the same namespace.

By law, an anticipation rejection under 35 U.S.C. § 102 requires that a single prior art reference disclose each and every element of the claim under consideration, and each element must be "arranged as in the claim." Beyda is wholly deficient in meeting these requirements, and thus fails these rejections are improper as a matter of law. In fact, Beyda teaches away from extending storage in the claimed manner, by teaching the need to have a second driver letter for added storage. Applicant submits that claim 1 and its dependent claims are clearly patentable over Beyda, and respectfully requests reconsideration and withdrawal of the rejections based on Beyda.

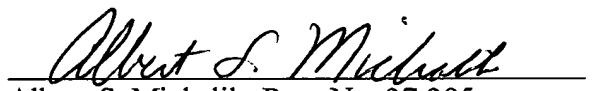
Applicant further submits that claims 9 and 16 likewise are not anticipated by Beyda for similar reasons, and because the relied-upon sections of Beyda were misinterpreted in the Office action. For example, claim 9 recites "a link file on the existing storage mechanism, the link file associated with information for identifying the file data on the new storage mechanism." Claim 16 recites "providing a link on the first storage mechanism to the second storage mechanism." Beyda merely describes copying actual files, and as discussed above, fails to disclose or suggest the concept of a link. There is a significant difference between a link as recited in claims 9 and 16, and an actual file as described in Beyda. Simply put, Beyda does not describe providing a link on the first storage mechanism to the second storage mechanism, nor does Beyda describe a link file on the existing storage mechanism for identifying the file data on the new storage mechanism. Furthermore, the new storage mechanism in applicant's technique provides additional storage in the namespace of the existing storage mechanism, whereas Beyda merely describes copying actual files from one namespace to another. Dependent claims 2-8, 10-15, and 17-19, by similar analysis, are not anticipated by the relied-upon reference. Reconsideration and withdrawal of the rejections of claims 9 and 16 and the dependent claims based on Beyda are respectfully requested.

CONCLUSION

For at least the foregoing reasons, Beyda fails to anticipate any of the claims of the present invention. Reconsideration and withdrawal of the rejections and timely allowance of this application is respectfully submitted.

If in the opinion of the Examiner a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney at (425) 836-3030.

Respectfully submitted,



Albert S. Michalik, Reg. No. 37,395
Attorney for Applicants
Law Offices of Albert S. Michalik, PLLC
704 - 228th Avenue NE, Suite 193
Sammamish, WA 98074
(425) 836-3030
(425) 836-8957 (facsimile)